

WHAT IS CLAIMED IS:

1. An optical reproducing device comprising:

predetermined length mark signal measurement means for measuring respective reproduction signal characteristics of a short reproducing power control mark and a long reproducing power control mark from information data recorded in an optical recording medium; and

power control means for controlling reproducing power of a light beam based on the reproduction signal characteristics,

wherein the predetermined length mark signal measurement means detects a specific pattern including the short reproducing power control mark from a bit arrangement pattern of the information data, and measures the reproduction signal characteristic corresponding only to the short reproducing power control mark included in the specific pattern.

2. The optical reproducing device of claim 1, wherein the predetermined length mark signal measurement means includes:

data reproduction means for reproducing information data bits from a reproduction signal of the optical recording medium;

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comparison means for comparing the bit arrangement pattern of the information data reproduced by the data reproduction means with the specific pattern, and detecting coincidence; and

signal measurement means for measuring the reproduction signal characteristic of information data bits corresponding to the short reproducing power control mark included in the specific pattern detected by the comparison means to coincide with the bit arrangement pattern.

3. The optical reproducing device of claim 1, wherein:

the short reproducing power control mark is a mark having a length of $2T$ (where T is a channel bit length), and the specific pattern is constituted by a pattern having a length arrangement of $mT \cdot 2T \cdot 2T \cdot nT$ (where m and n are predetermined positive integers).

4. The optical reproducing device of claim 2, wherein:

the short reproducing power control mark is a mark having a length of $2T$ (where T is a channel bit length), and the specific pattern is constituted by a pattern having a length arrangement of $mT \cdot 2T \cdot 2T \cdot nT$ (where m and

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n are predetermined positive integers).

5. The optical reproducing device of claim 3,
wherein $m = n = 2$.

6. The optical reproducing device of claim 4,
wherein $m = n = 2$.

7. The optical reproducing device of claim 1,
further comprising reproduction condition control means
for controlling a reproduction condition based on the
measured reproduction signal characteristics.

8. The optical reproducing device of claim 2,
further comprising reproduction condition control means
for controlling a reproduction condition based on the
measured reproduction signal characteristics.

9. The optical reproducing device of claim 3,
further comprising reproduction condition control means
for controlling a reproduction condition based on the
measured reproduction signal characteristics.

10. The optical reproducing device of claim 4,
further comprising reproduction condition control means

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for controlling a reproduction condition based on the measured reproduction signal characteristics.

11. The optical reproducing device of claim 5, further comprising reproduction condition control means for controlling a reproduction condition based on the measured reproduction signal characteristics.

12. The optical reproducing device of claim 6, further comprising reproduction condition control means for controlling a reproduction condition based on the measured reproduction signal characteristics.

13. The optical reproducing device of claim 7, wherein:

the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

14. The optical reproducing device of claim 8, wherein:

the predetermined length mark signal measurement

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means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

15. The optical reproducing device of claim 9, wherein:

the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

16. The optical reproducing device of claim 10, wherein:

the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

17. The optical reproducing device of claim 11,

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wherein:

the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

18. The optical reproducing device of claim 12, wherein:

the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

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